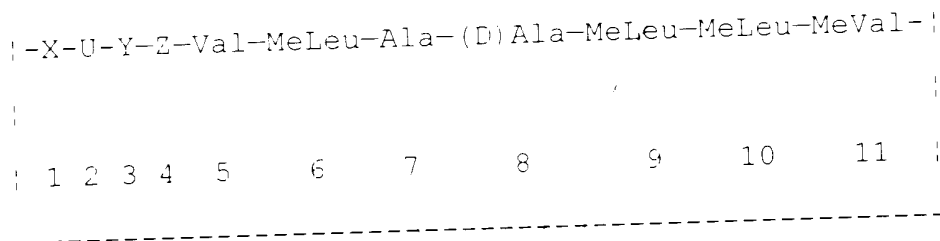


### Claims

8. Synthesised cyclosporin having the formula:



wherein:

X is -MeBmt or 6,7-dihydro-MeBmt-

U is -Abu, Nva, Val, Thr

Y is Sar or (D)-MeSer or (D)-MeAla or (D)-MeSer (OAcyl)

Z is (N-R)aa where aa={Val, Ile, Thr, Phe, Tyr, Thr (OAc), Thr (OG<sub>1</sub>), Phe (G<sub>2</sub>), PheCH<sub>2</sub>(G<sub>3</sub>), Tyr (OG<sub>3</sub>)} with R = {alkyl > CH<sub>3</sub>};

G<sub>1</sub> = {phenyl-COOH, phenyl-COOMe, phenyl-COOEt};

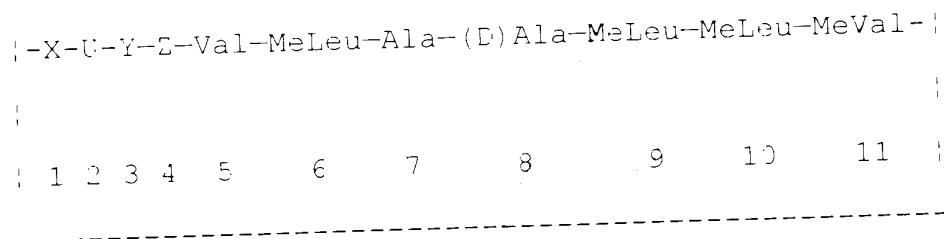
G<sub>2</sub> = {CH<sub>2</sub>COOH, CH<sub>2</sub>COOMe(Et)<sub>4</sub>; CH<sub>2</sub>PO(OMe)<sub>2</sub>, CH<sub>2</sub>PO(OH)<sub>2</sub>};

G<sub>3</sub> = {PO(OH)<sub>2</sub>, PO(OCH<sub>2</sub>CH=CH<sub>2</sub>)<sub>2</sub>, CH<sub>2</sub>COOH, CH<sub>2</sub>COOMe(Et)}.

9. Cyclosporin according to claim 8, wherein the residue Z in position 4 is (R)Val where R>CH<sub>3</sub> and R<C<sub>10</sub>H<sub>21</sub>.

10. Cyclosporin according to claim 8, wherein the residue Z in position 4 is N-ethyl-valine.

11. Pharmaceutical composition containing the compound having the formula:



wherein:

X is -MeBmt or 6,7-dihydro-MeBmt-

U is -Abu, Nva, Val, Thr

Y is Sar or (D)-MeSer or (D)-MeAla or (D)-MeSer (OAcyl)

Z is (N-R)aa where aa={Val, Ile, Thr, Phe, Tyr, Thr (OAc), Thr (OG<sub>1</sub>), Phe (G<sub>2</sub>), PheCH<sub>2</sub>(G<sub>3</sub>), Tyr (OG<sub>2</sub>)} with R = {alkyl > CH<sub>3</sub>};

G<sub>1</sub> = {phenyl-COOH, phenyl-COOMe, phenyl-COOEt};

G<sub>2</sub> = {CH<sub>2</sub>COOH, CH<sub>2</sub>COOMe(Et), CH<sub>2</sub>PO(OMe)<sub>2</sub>, CH<sub>2</sub>PO(OH)<sub>2</sub>};

G<sub>3</sub> = {PO(OH)<sub>2</sub>, PO(OCH<sub>2</sub>CH=CH<sub>2</sub>)<sub>2</sub>, CH<sub>2</sub>COCH, CH<sub>2</sub>COOMe(Et)}

12. Pharmaceutical composition according to claim 11, wherein it is combined with a pharmaceutically acceptable solution.

13. A medicinal product intended for the treatment and prevention of AIDS, containing the cyclosporin according to claim 8 or claim 11.

14. A medicinal product intended for the treatment and prevention of AIDS containing the cyclosporin according to claim 10.

Respectfully submitted.

Roland M. WENGER; Manfred MUTTER; and  
Thomas RUCKLE

Dec. 28, 2000  
Date

By: Michael O. Sturm  
Michael O. Sturm  
Reg. No. 26,078

HENDERSON & STURM LLP  
206 Sixth Avenue, Suite 1213  
Des Moines, Iowa 50309-4076  
Telephone: (515) 288-9589  
Telefax: (515) 288-4860